

# ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY

1333 BROADWAY, SUITE 220 • OAKLAND, CA 94612 • PHONE: (510) 836-2560 • FAX (510) 836-2185 E-MAIL: mail@accma.ca.gov • WEB SITE: accma.ca.gov

#### PLANS AND PROGRAMS COMMITTEE

#### **MEETING NOTICE**

Monday, March 13, 2006 10:30 A.M.

CMA Board Room 1333 Broadway, Suite 220 Oakland, California 94612 (see map on last page of agenda) Members:

Chair: Councilmember Larry Reid Vice Chair: Supervisor Scott Haggerty

Mayor Allan Maris Mayor Roberta Cooper Mayor Mark Green

Mayor Jennifer Hosterman

AC Transit Director Dolores Jaquez

**BART Director Tom Blalock** 

Staff Liaison: Jean Hart Secretary: Christina Muller

#### **AGENDA**

Copies of Individual Agenda Items are Available on the CMA's Website

#### 1.0 PUBLIC COMMENT

Members of the public may address the Committee during "Public Comment" on any item <u>not</u> on the agenda. Public comment on an agenda item will be heard when that item is before the Committee. Anyone wishing to comment should make their desire known to the Chair.

#### 2.0 CONSENT CALENDAR

Action

- **2.1 Minutes of February 13, 2006 (page 1)**
- 2.2 Deputy Directors' Report\* (page 7)

#### 3.0 ACTION ITEMS

3.1 East Bay SMART Corridors Program: Funding Strategy Discussion/Action For the Operations and Maintenance (O&M) Activities\* (page 15)

The Plans and Programs Committee is requested to review and comment on the attached Draft Report for the Operations and Maintenance (O&M) of the East Bay SMART Corridors Program. The Report identifies the amount of funding remaining to meet O&M expenses, the rate at which these funds will be drawn down and strategies for meeting these expenses in future years. The Report identifies alternatives to generate "new" revenue as well as strategies to fund these expenses within existing revenues.

### 3.2 CMA TIP: I-580 Soundwall Design Projects\* (page 35) Discussion/Action

The CMA Board approved \$1,017,000 of CMA TIP funds to complete the design of freeway soundwalls along I-580 in San Leandro (Estudillo to 141<sup>st</sup>) and Oakland (14<sup>th</sup> and Ardley). The CMA has received consultant proposals to complete this design work. Based on a review of the Caltrans work completed to date and considering the time estimated to complete the work that is in the consultant proposals, staff proposes to adjust the budget required to complete the design. Based on estimated hours to complete the work in the consultant proposals, it is recommended that the Board approve an additional \$1,233,000 of CMA TIP funds be programmed to the project for a total funding package of \$2,250,000.

**3.3** CMA Exchange Program: Quarterly Status Report\* (page 37) Discussion/Action It is recommended that the CMA Board approve the attached Quarterly Status report for local projects programmed in the CMA Exchange Program.

#### 4.0 DISCUSSION OR INFORMATION ITEMS

No items this month.

### 5.0 ADJOURNMENT/NEXT MEETING: MONDAY, April 10, 2006

- (#) All items on the agenda are subject to action and/or change by PPC.
- \* Attachments enclosed
- \*\* Materials will be available at the meeting.

PLEASE DO NOT WEAR SCENTED PRODUCTS SO INDIVIDUALS WITH ENVIRONMENTAL SENSITIVITES MAY ATTEND

## PLANS AND PROGRAMS COMMITTEE MINUTES OF FEBRUARY 13, 2006 OAKLAND, CA

Vice Reid convened the meeting of the Plans and Programs Committee at 10:30 a.m. The roster of attendance is attached.

### 1.0 PUBLIC COMMENT

There were not public comments.

#### 2.0 CONSENT CALENDAR

#### 2.1 Minutes of January 9, 2006

# 2.2 Deputy Directors' Report

A motion was made by Cooper to approve the Consent Calendar; A second was made by Lockhart. The motion passed unanimously.

#### 3.0 ACTION ITEMS

## 3.1 Lifeline Transportation Program

Stark requested that the Committee recommend that the Board: 1) approve Alameda County's Lifeline criteria, 2) approve recommendation of weighting of Lifeline criteria, and 3) approve minimum and maximum grant amounts. Alameda County's Lifeline Transportation Program budget includes approximately \$1.1 million in Congestion Mitigation Air Quality Improvement (CMAQ) funds, \$2 million in State Transit Assistance (STA) funds, and an estimated \$1.8 million in JARC funds. With MTC's current estimate of JARC funds for Alameda County, a total of \$4.9 million will be available for the Alameda County Lifeline Transportation Program. Haggerty requested that the Call for Projects indicate that portions of the County that are not identified for Community Based Transportation Plans but meet MTC's criteria for serving communities of need, are eligible for Lifeline funds. A motion was made by Haggerty to forward the three actions items to the Board for approval; a second was made by Cooper. The motion passed unanimously.

# 3.2 Federal STP/CMAQ Funds: Cycle 3 Projects

Todd requested that the Committee review and approve the final program of projects for Cycle 3 Local Streets and Roads Shortfall (Cycle 3 LSR). ACTAC recommended approval of this item at their February 7<sup>th</sup> meeting. A motion was made by Haggerty to approve the final program of projects for Cycle 3 Local Streets and Road Shortfall (Cycle 3 LSR); a second was made by Blalock. The motion passed unanimously.

# 3.3 Federal STP/CMAQ Program: At Risk Report

O'Brien of Advance Project Development Group reviewed the Quarterly at Risk report for local projects programmed in the STP/CMAQ Program. A motion was made by Cooper to approve the Quarterly At Risk Report; a second was made by Blalock. The motion passed unanimously.

Plans & Programs Minutes February 13, 2006 Page 2 of 3

3.4 State Transportation Improvement Program: Quarterly at Risk Report

O'Brien of Advance Project Development Group reviewed the Quarterly at Risk report for local projects programmed in the State Transportation Improvement Program. A motion was made by Haggerty to approve the Quarterly at Risk Report; a second was made by Blalock. The motion passed unanimously.

- 3.5 2006 State Transportation Improvement Program (STIP): Final Program of Projects Todd requested that the Committee review and approve the the proposed adjustments to the 2006 STIP Program. ACTAC recommended approval of this item at their February 7<sup>th</sup> meeting. A motion was made by Cooper to approve the 2006 State Transportation Improvement Program (STIP): Final Program of Projects; a second was made by Blalock. The motion passed unanimously.
- Furger advised the Committee that the City of Piedmont is 95% complete with the design of the signalization project at the intersection of Grand Ave/Rose Ave/Arroyo Ave. The total project cost is \$287,500. Piedmont is requesting assistance from the CMA in bridging the funding gap of approximately \$221,700. A motion was made by Blalock authorizing the CMA to assist the City of Piedmont with the bridging of funding gap approximately \$221,700.00; a second was made by Cooper. The motion passed unanimously.
- 3.7 CMA Capital Expenditure Program (CEP): Quarterly Status Report
  Garcia requested that the Committee recommend that the CMA Board review and accept the Capital
  Expenditure Program (CEP) Report. Garcia noted that this report provides an update on the status of
  capital projects that are being implemented by the CMA, as well as other projects in Alameda
  County that may be of interest to the CMA Board. This report is presented to the CMA Board on a
  quarterly basis to keep the Board updated on the delivery status of CMA sponsored projects. A
  motion was made by Blalock to for staff recommendations to the Board for approval; a second was
  made by Cooper. The motion passed unanimously.
- Walukas advised the Committee that the CMA received a grant from the Federal Highway Administration (FHWA) to implement a dynamic ridesharing pilot project. In Fall 2005, the Board approved a total consultant budget of \$178,700, consisting of \$142,960 in federal funds and a \$35,740 local match. RideNow was launched on November 15<sup>th</sup>, 2005. Now wider marketing efforts are needed to increase participation and to demonstrate that the ridematching program could be applied at a regional level. The Committee is requested to recommend that the Board approve programming of \$24,000 in federal funds previously approved by FHWA and \$6,000 in local match of which \$4,500 is from CMA TIP funds and \$1,500 is from in-kind staff time. A motion was made by Lockhart to forward staff recommendation to the Board for approval; a second was made by Green. The motion passed unanimously.
- 3.9 Congestion Management Program: 2004-05 Draft Mobility Monitor
  Suthanthira advised the Committee that the CMA prepares the Mobility Monitor each year based on
  the annual Performance Report. She reviewed a copy of the draft newsletter. The Committee is
  requested to recommend that the CMA Board approve the 2004-05 Mobility Monitor. Graphics will

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be added upon approval of the text. A motion was made by Cooper to forward the draft newsletter and 2004-2005 Mobility Monitor to the Board for approval; a second was made by Green. The motion passed unanimously.

## 4.0 DISCUSSION OR INFORMATION ITEMS

# 4.1 Funding for SMART Corridors Program

Furger advised the Committee that in March of 2005, staff presented to the Plans and Programs Committee a draft Operations and Maintenance Plan for the SMART Corridors. He noted that staff is updating this plan and evaluating options for a dedicated fund source for the SMART Corridors O&M. Staff is seeking the Committee's input on the approach to the revised plan and any other issues that should be addressed in a revised O&M funding plan. This was for information only.

# 5.0 ADJOURNMENT/NEXT MEETING: MONDAY, March 13, 2006

Chair Reid adjourned until Monday, March 13, 2006 at the CMA Office, 1333 Broadway, Suite 220, Oakland, CA 94612.

Attest By

Christina Muller, Secretary



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# PLANS AND PROGRAMS COMMITTEE ROSTER OF ATTENDANCE

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A. Bith Walukas CMA (asultant 510/836-2560 x26 accuma.ca.

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March 13, 2006 Agenda Item 2.2

#### Memorandum

Date:

March 1, 2006

To:

Plans and Programs Committee

From:

Jean Hart, Deputy Director

Frank Furger, Deputy Director

Subject:

Deputy Director's Report

Countywide Bicycle Plan Update — The next Bicycle Plan Update Workshop is on March 7<sup>th</sup> at 11:00 a.m. before the ACTAC meeting. At this meeting, the group will discuss the vision and financially constrained networks for capital projects, transit access projects, and maintenance and rehabilitation projects. Criteria for identifying priority projects in all three categories will also be discussed. The ACCMA reviewed MTC's Draft Report "Routine Accommodation of Bicyclists and Pedestrians in the Bay Area: Results from Interviews with Transportation Professionals and Recommendations to Encourage Routine Accommodation". The attached letter with comments was sent to MTC.

MTC's Lifeline Transportation Program – CMA and ACTIA are issuing a joint Call for Projects for the Lifeline Transportation Program on March 1, 2006. Applications are due April 28, 2006.

I-880 Corridor System Management Study — Caltrans' consultants presented the preliminary findings of the study in terms of congested bottlenecks and potential causes of congestion along with a draft list of projects that will be used for performance evaluation to the CMA Board on January 23, 2006. The next steps are to identify complete corridor improvements and develop priorities and a sequencing plan using the microsimulation model.

North I-880 Operations and Safety Project – The expenditure plan for Regional Measure 2 included funding for projects identified in the North I-880 Study. RM2 funds were allocated for improvements at Northbound I-880 at 29<sup>th</sup> Ave. A meeting with the general public was held in mid January to review the project and design concept. The

concept was accepted with overall support. A preliminary environmental assessment report (PEAR) is being completed.

San Pablo Rapid Bus Stop Improvements - The scope, schedule and implementation plan for completing the improvements to support the Rapid service have been approved by the policy committee. The CMA will be taking the lead in implementing approximately \$2.2 million in improvements funded through AC Transit and Measure B. The design of the improvements has started under the project name "San Pablo Rapid Bus Stop Improvements". The construction is expected to start in fall of 2006 and would be completed by March of 2007.

SMART Corridors Program - The CMA Board and West Contra Costa County Transportation Advisory Committee (WCCTAC) as well as the participating agencies have adopted the plan for the Operations and Management of the current system. AC Transit, Planning areas 1, 2, and 3 are providing their share of the funding plan for the Operations, Maintenance, and Management (O&M) of the system. Discussions continue with other partners on their contributions. A possible long term funding solution was lost with the Governor's veto of AB 1623 (Klehs). Staff will present a recommendation in the near future to preserve the investments previously made, being deployed, and A selection process for a maintenance contractor to assist the project proposed. stakeholders in maintaining field equipment has been completed. Republic Electric, Inc. was ranked the highest by the selection panel. The maintenance contractor will assist with maintaining field devices. The public website address for the SMART Corridors is: http://www.smartcorridors.com. CMA is working with emergency service providers on new incident management projects that have been funded with new grants and federal earmarks. CMA is also working with the City of Oakland to implement Transportation Management Centers (TMC) for the City and CMA for improved transportation Management. These efforts would also include improving the stability of the SMART Corridors network, which is beneficial to all participating agencies and public. MTC approved a grant application by CMA on behalf of all project partners along San Pablo corridors to optimize traffic signal timing plans for 115 intersections on San Pablo Avenue as well as many crossing arterial roadways connecting San Pablo Avenue with I-80.

Rapid Bus Corridor on International/Broadway/Telegraph — CMA staff is coordinating with AC Transit, the cities of Berkeley, Oakland, San Leandro, and Caltrans on the implementation of this new Rapid Bus Corridor. This Corridor starts at the Bayfair Center, in the City of San Leandro and includes portions of E. 14<sup>th</sup>/International Boulevard, Broadway, and Telegraph in the Cities of Oakland, and Berkeley. The length of this corridor is about 18 miles and is heavily used by transit riders. CMA staff has secured three separate TFCA grants totaling \$1.4 million to supplement Measure B funds provided to AC Transit by ACTIA as well as RM2 funds from MTC. This project has a very aggressive schedule and is being fast tracked to meet the June 26, 2006 deadline for the start of service by AC Transit. CMA is administering multiple procurement and construction contracts that are running concurrently to meet the aggressive schedule. Construction on Broadway is 95% complete. Construction for the Telegraph Avenue

segment is about 60% complete. Construction on the E 14<sup>th</sup>/International segment is 30% complete. All contracts for the agency-furnished equipment have been executed and equipment is being delivered to the contractors. AC Transit has requested assistance from the CMA on construction of 20<sup>th</sup> Street/Uptown transit improvements as well as for the design and installation of additional Closed Circuit TV (CCTV) cameras at the end of all Rapid Bus lines as supplemental work. Most of this added work is scheduled to be complete by June 26, 2006. The CMA Board agenda in February includes the award of Uptown Transit Center on 20th Street between Broadway and Telegraph. The low bid by NTK construction was \$1,590,918, which is about \$255,000 below the engineer's estimate of probable cost. Based on a request by AC Transit, the award is contingent upon issuance of a minor encroachment permit from the City of Oakland.

Grand/MacArthur Corridor Transit Enhancements: CMA and AC Transit are the joint sponsors of the Regional Express Bus Program that is funded by Regional Measure 2. The work is being coordinated with the City of Oakland and Caltrans. A component of this project is the transit enhancements along the Grand/MacArthur Corridor starting at Eastmont Mall and ending at Maritime for the Bay Bridge access. The current AC Transit line serving this corridor is called "NL" with final destination at the Transbay Terminal in San Francisco. This project includes a Transit Operations Analysis and design and construction of various traffic signal modifications along this corridor. In addition to the RM2 funds, there is also a \$205,000 TFCA grant to AC Transit for the installation of Transit Signal Priority components in the corridor. DKS Associates, the consultant for this project, has completed traffic engineering and transit analysis for the whole corridor with the system engineering analysis pending. The design activity for the seven intersection included in TFCA grant has started. Additional design activities are pending on options presented to the TAC by the consultant. The CMA has completed a community outreach effort which took input from the City Council districts, and will do outreach with community groups and property owners that may benefit from or be impacted by the proposed improvements. The construction is expected to start in mid 2006 for the seven intersections in the TFCA application, or in fall to include additional components for economy of scale.

Route 84 HOV – Dumbarton Corridor – In October 2004, MTC allocated \$2 million in RM2 funds to the CMA for the design of HOV improvements on Route 84 in the Dumbarton Corridor. The CMA is coordinating development of this project with Caltrans.

I-680 Southbound HOV Lane Project – The CMA is partnering with Caltrans in the design of this project with a CMA design consultant developing plans for all structure modifications required in the corridor and Caltrans completing all civil design. Final design is being coordinated to incorporate the SMART Lane components. Construction is scheduled to begin in 2006 subject to the availability of funds in the STIP.

I-680 HOV Lane Project - Soundwall Construction - The maintenance of the facility has been returned to Caltrans in late February. The project has still not been fully

completed and will include liquidated damages. The project is one of the components of the overall I-680 corridor improvements.

I-680 SMART Carpool Lane project – The final PSR/PR was submitted to Caltrans for signature. Work has begun on the 35% engineering. Additional revenue estimates are underway. The project cost estimates and funding plan have been updated. The draft Administrative Code will be presented to the JPA Board on March 10<sup>th</sup>.

**Dumbarton Corridor** – The consultants completed Phase 1 of the EIR/EIS process, focusing on alternatives analysis. Phase 2, which will analyze a limited number of rail alternative and bus alternatives, will be complete June 2006.

BART to Silicon Valley (Silicon Valley Rapid Transit Corridor – SVRTC) — The Final EIR was complete in 2002. The EIS and Supplemental EIR, which includes modifications to the original project such as structural engineering options that provide cost saving options along the alignment, will began this past summer. The EIS and Supplemental EIR are expected to be complete in 2006.

### I-580 Tri-Valley Corridor Improvements

- a. I-580 TMP Project This initial component of planned corridor improvements will implement key elements of a Traffic Management Plan (TMP), including Traffic Operations Systems (TOS) and Intelligent Transportation Systems (ITS) elements, in the Tri-Valley area. The TMP project will assist with traffic management during construction of the I-580 improvements and provides a foundation for bringing the Tri-Valley jurisdictions into the CMA's SMART Corridor Program. It will also provide infrastructure capability to local and regional transit providers to allow transit signal priority (TSP) for express bus routes to be implemented on existing local routes between downtown Livermore and Dublin/Pleasanton BART during construction of the EB Interim HOV project, as well as on the EB HOV route when the facility is complete. The CMA's design consultant is preparing the project report in parallel with preliminary design activities. It is anticipated the project will be advertised in summer 2006.
- **b. I-580 Livermore Soundwall Project** This component of planned corridor improvements will construct a soundwall along the north edge of I-580 just east of First Street in Livermore. Caltrans previously prepared the environmental clearance and design documents. The CMA will assume responsibility for completing the final design package and constructing the improvements in 2006. This project is fully funded in FY 06/07 of the STIP.
- c. I-580 EB Interim HOV Lane Project This project will provide an interim eastbound HOV lane to commuters on I-580 between Hacienda Drive in Pleasanton and Greenville Road in Livermore. The consultants are nearing completion of the response to comments on the Administrative Draft environmental document. Caltrans biologists requested that a bat survey be completed. The survey is completed and recommendations are being prepared. Preliminary engineering and at-risk design are progressing

concurrently. Comments on the 35% PS&E submittal have been received from Caltrans; a 65% submittal is anticipated in April, with completion of the preliminary design scheduled in late summer 2006. Upon approval of the eastbound-only environmental document, the CMA's design consultant will proceed with final design of the project. As a part of this project, the CMA is also preparing an advance project that will implement a Traffic Management Plan (TMP), including Traffic Operations Systems (TOS) and Intelligent Transportation Systems (ITS) elements, in the Tri-Valley area. This TMP project will assist with traffic management during construction of the I-580 improvements and provides a foundation for bringing the Tri-Valley jurisdictions into the CMA's SMART Corridor Program.

d. I-580/I-680 Interchange Modifications – The CMA is partnering with Caltrans in the development of a Project Study Report (PSR) for the I-580/I-680 Interchange Modification Project. The traffic modeling assumptions to be used are being reviewed by Caltrans and FHWA. Caltrans will be the lead agency responsible for the preparation of the PSR, supplemented by a CMA consultant support services team as necessary to maintain an expedited delivery schedule. A cooperative agreement between the CMA and the State is currently being negotiated. The PSR will evaluate options to address key commute movements currently experiencing significant congestion and will identify alternatives for further evaluation, including feasible options for direct connector structures for two critical commute movements: 1) westbound I-580 HOV to southbound I-680 HOV; and 2) northbound I-680 HOV to eastbound I-580 HOV. The PSR will also evaluate ultimate HOV movements and update the master buildout plan for the I-580/I-680 interchange. The PSR is anticipated to be completed in late 2006. This project is being developed as an element of the RM2 I-580 Tri-Valley Corridor Improvements.

e. I-580 WB Auxiliary Lane Project – In cooperation with ACTIA, the CMA is taking the lead as the implementing agency for this project. The project consists of two westbound I-580 auxiliary lane segments as follows: a) Airway Blvd. to Fallon Rd., and b) Fallon Rd. to Tassajara Rd. The CMA is currently reviewing the environmental clearance status of these segments. The project is fully funded by ACTIA Measure B. The CMA and ACTIA are currently negotiating the agreements necessary to establish project delivery roles.

Ardenwood Park & Ride Lot Project – This project will acquire a site near the Route 84 / Ardenwood Boulevard Interchange in Fremont to expand an existing park-and-ride lot, which is operating at capacity. The expansion is expected to provide over 100 new parking stalls for commuters. The project is funded solely by Regional Measure 2 (RM2). The CMA is co-sponsoring this project with AC Transit, and the CMA is taking the lead as the implementing agency. The environmental document for this project was approved in late 2005. An RFP for design services was issued in December, and the CMA is anticipating selection of a consultant in March. Right of way acquisition activities will continue concurrently.

Tri-Valley Triangle Analysis – The TAC approved the final assumptions for the travel forecast model and the operations model. The alternatives are being evaluated using

qualitative and quantitative data. The TAC is scheduled to meet March 9<sup>th</sup> to review the results of the travel demand modeling. They will also review and approve the approach to applying the qualitative measures of effectiveness.

Berkeley/Oakland/San Leandro BRT - The Draft EIS/EIR is expected to be complete early 2006.

Transportation and Land Use Program – The CMA Board approved a scope and budget for establishing a Transit Oriented Development (TOD) technical consultant pool and a TOD project fund monitoring program. Both programs will be initiated early 2006. The Board recommended five Transportation for Livable Communities (TLC) projects and budgets, which were sent to MTC in January 2006 for inclusion in the 2006 STIP.

Community Based Transportation Plan: West Oakland – The consultant team, with assistance of local high school interns, completed public outreach to confirm the community's transportation needs and potential solutions to meet them. A TAC meeting is scheduled March 8<sup>th</sup> to review the results of community outreach and discuss the feasibility and potential schedule for transportation solutions.

Guaranteed Ride Home Program – The program was initiated in April 1998. One hundred and thirty five employers and 3,703 employees are registered in the program, and 1,007 rides have been taken, including 46 rental car rides in the countywide rental car program. The average cost per taxi trip is now \$81.20. The average trip length is 39.15 miles. The average trip distance for a rental car ride is 84 miles and the cost per rental car used is \$55. Using the rental car saves \$77 for each average 65-mile trip.

Dynamic Ridesharing – Forty-four participants are currently registered in the program. Since program inception (November 15<sup>th</sup>, 2005), 394 ridematch requests and 20 ridematches have been made. There would have been 8 additional matches made in the afternoon, but there has been some confusion among participants about where to meet their ridematch partners. Information clarifying program protocols for afternoon matches has been sent to the participants. In the last month (January 27<sup>th</sup> through February 27<sup>th</sup>), there have been 145 ridematch requests and 2 successful ridematches. There would have been 4 additional matches made in the afternoon, but they were not successful for the reason mentioned above. The Task Force is moving forward with increased marketing efforts and is planning a major marketing event in mid to late March. The Task Force will next meet on March 8<sup>th</sup>, 2006 to finalize the marketing plan.

Transportation Fund for Clean Air – Vehicle Incentive Program – The Vehicle incentive program (VIP) is a grant that helps project sponsors acquire low emission, light-duty alternative fuel vehicles. Generally, public agencies located within the Bay Area Air Quality Management Air District, (Air District) jurisdiction can apply for VIP funds. Eligible vehicles include new vehicles that the following eligibility criteria:

• The vehicle must have a gross vehicle weight of 10,000 pounds or less.

- The vehicle must be powered by natural gas, propane, hydrogen, electricity, or
  hybrid electric motors or engines (Except for hybrid electrics, vehicles with the
  ability to run on gasoline or diesel fuel are not eligible.)
- The vehicle must be certified to the SULEV, PZEV, or ZEV emission standard by the California Air Resource Board.

Applications will be accepted beginning September 19, 2005. Incentives will be awarded on a first-come, first-served basis. Additional information on this grant is available at www.baaqmd.gov.

Countywide Travel Demand Model Update – For the Countywide Travel Demand Model Update, the existing and future networks have been finalized. The 2000, 2005, 2015, and 2030 reallocated land uses are being reviewed by the jurisdictions. The land uses are reallocated to the updated transportation analysis zones and are based on Projections 2005. Comments are due by March 3, 2006. The consultant continues to work on the travel demand model processes for application to Cube/Voyager software and for refinement of the regional models to provide more detail in Alameda County. Work also continues on the validation of the model by compiling survey data and creating calibration targets. March Task Force meeting has been cancelled. The next meeting will be held on April 5, 2006 at 9:00 a.m.

Pedestrian and Bicycle Facilities Technical Reference Guide for Planners and Engineers - Caltans has made available a July 2005 update of the Pedestrian and Bicycle Facilities Technical Reference Guide for Planners and Engineers online at the following address: <a href="www.dot.ca.gov/hq/traffops/survey/pedestrian/pedbike.htm">www.dot.ca.gov/hq/traffops/survey/pedestrian/pedbike.htm</a>. The report includes standards and innovative practices for the development of bike & pedestrian facilities.

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#### Memorandum

March 13, 2006 Agenda Item 3.1

Date:

March 3, 2006

To:

Plans and Programs Committee

From:

Cyrus Minoofar, Principal Transportation Engineer

Subject:

East Bay SMART Corridors Program: Strategy to fund Operations and

Maintenance (O&M) Activities

**Action Requested** 

The Plans and Programs Committee is requested to review and comment on the attached Draft Report for the Operations & Management (O&M) of the East Bay SMART Corridors Program The Report identifies the amount of funding remaining to meet O&M expenses, the rate at which these funds will be drawn down and strategies for meeting these expenses in future years. The Report identifies alternatives to generate "new" revenue as well as strategies to fund these expenses within existing revenues.

**Next Steps** 

The comments received from the PPC and ACTAC will be incorporated into a final document that will be presented to the Committees and the Board for approval at the April meetings.

#### Discussion

For the last several months, ACCMA staff has analyzed the O&M funding situation for SMART Corridors and believes strategies must be developed in the very near future to identify how ongoing O&M costs will be met. The Draft Report documents the revenues and costs to date as well as the remaining funding. Alternative methods of raising new revenues are described as well as strategies for allocating costs and funding SMART Corridors in the future assuming no new dedicated revenue stream.

As background, several of the principal findings and conclusions of the Report are summarized below. They include: current and remaining O&M funding, anticipated costs, and the funding plan that was adopted by the ACCMA Board in April, 2005 to meet these ongoing expenses.

**Current O&M Funding situation** 

To date, an estimated \$2,758,480 of revenue has been received to meet O&M costs of the SMART Corridors Program (SCP). The majority of these revenues, \$1,750,000, consisted of an original CMAQ grant. The remaining amount is composed of revenues from AC Transit (\$122,880), TFCA (\$395,000), MTC (\$200,000), \$92,000 from local agencies STP funds in Alameda County, \$55,600 from local agencies in Contra Costa County, and \$22,600 from WestCAT. A complete list of the contributions is included in the Report.

As of March 1, 2006, a total of \$2,311,180 has been spent on SCP O&M costs. This leaves a balance of \$447,300 in remaining funds. The current expenditures for minimal, sustainable system operation are approximately \$55,320 per month, or \$663,840 annually, for existing I-80 and I-880 corridors. Based on these assumptions, the current committed O&M funds would be exhausted in approximately eight (8) months, or by December 1, 2006.

**Anticipated Monthly Costs** 

As discussed above, stretching available O&M funding to only meet basic costs will require approximately \$55,320 per month for existing I-80 and I-880 corridors. The basic costs for the minimal, sustainable operation do not include any costs associated with contingencies, software maintenance, and upgrades of hardware. However, in order to adequately fund ongoing O&M for FY 06/07, approximately \$90,193 per month or \$1,082,313 for the full year is needed for existing I-80 and I-880 corridors. The table below summarizes the annual anticipated O&M costs for the FY 06/07 and following two fiscal years:

#### Three Year O&M Costs

Item	FY 06/07	FY 07/08	FY 08/09
Operations (Utilities, Communications, etc)	\$650,737	\$868,456	\$911,879
Field Equip't Maintenance & Repair	331,448	574,496	603,211
Professional Services (Software Main't)	100,128	192,254	201,867
Total O&M Costs	\$1,082,313	\$1,635,206	\$1,716,966
Average Monthly Cost	\$90,193	\$136,267	\$143,081

Board Adopted Funding Plan

In April 2005, the ACCMA Board adopted the estimated annual O&M cost sharing amount included for FY 06/07 as shown in the table above. The Board also adopted an O&M cost distribution plan for FY 06/07 as shown in column one below, for reference.

The FY 07/08 and FY 08/09 columns in the table below differ from the Board adopted FY 06/07 distribution plan because MTC declined to participate in the funding beyond FY 05/06. Additionally, the increase in costs is associated with the completion of International-Telegraph Rapid Bus and SMART Corridors. As a consequence, the balance had to be redistributed in the two out years which represents staff's proposed distribution beyond the current year.

#### O&M Cost Distribution Plan

Item	FY 06/07*	FY 07/08**	FY 08/09**
Transit Agencies			
AC Transit (TSP maint./ATMS costs)	\$137,424	\$330,000	\$330,000
West CAT (AVL wireless maint. costs)	57,584	60,350	63,368
Regional Agencies			
MTC (1/3 of costs for FY 06/07 only)	295,768	alle alle	
CMA's (1/3 of costs for FY 06/07 only)			
ACCMA (mileage based)	215,821	481,075	511,506
CCTA (mileage based)	79,947	141,353	150,293
Local Agencies (1/3 of costs FY 06/07 only)			
Alameda Co. Local Agencies	201,702	481,075	511,506
Contra Costa Co. Local Agencies	94,067	141,353	150,293
Total Costs	\$1,082,313	\$1,635,206	\$1,716,966

<sup>\*</sup> Previously adopted by the Board.

It should be noted that the Board also reviewed cost distribution alternatives among the local agencies, including the counties, based on mileage, the number of signals within the jurisdiction, and an equal distribution. The recommended, and approved, cost sharing plan was ultimately based on mileage.

<sup>\*\*</sup> Not adopted and does not include MTC's contribution. Expenditures are estimates only.

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# OPERATIONS AND MANAGEMENT OF THE EAST BAY SMART CORRIDORS PROGRAM

AN EVALUATION OF COSTS, REVENUES AND ALTERNATIVES

March 1, 2006

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## **Executive Summary**

The purpose of this report is to present detailed information about the East Bay SMART Corridors and the Operating and Maintenance (O&M) funding requirements to sustain the program. The report also discusses the benefits, constraints and opportunities and options to potentially reduce or constrain the O&M costs.

The East Bay SMART Corridors program is a cooperative effort by the Alameda County CMA and 27 other partner agencies to plan, implement, operate and maintain a multi-modal advanced transportation management system along the major arterials in Alameda and Contra Costa Counties. The goal of the East Bay SMART Corridors is to improve transportation mobility, efficiency and safety through better congestion management, real-time traveler and transit signal priority, and improved incident response.

The East Bay SMART Corridors program includes Advanced Transportation Management Systems (ATMS) field components and centralized management system. The program can be divided into the following major components:

- Communication System
- Field Utilities
- Centralized ATMS Hardware and Software
- Agency ATMS System
- ATMS Field Equipment
- Signal Control System
- Administration

A detailed examination of existing O&M expenses indicates that the existing program has ongoing O&M expenditure requirements of approximately \$663, 840 annually for a minimal, sustainable operation for existing corridors I-80 and I-880. The minimal, sustainable operation does not include any costs for contingencies, software maintenance, and upgrades of hardware. Based on current revenue stream, as of March 1, 2006, there is \$447,300 in remaining funding for the program and the current funds would be exhausted in approximately eight months, or by December 1, 2006.

A number of options have been explored to potentially reduce the O&M costs, but these are not significant enough the make a major difference in the funding requirement for program. In respect to the funding opportunities, there are four potential sources of revenue. They are: 1) Use of Federal SAFETEA-LU funds, Transportation Funds for Clean Air (TFCA), CMA TIP, 2) a vehicle use fee such as an annual vehicle registration fee or increment to the existing vehicle registration fee implemented by the State Dept. of Motor Vehicles, 3) a County Service Area implemented probably county-wide, including incorporated areas, and, 4) a benefit assessment district aligned along the specific corridor, in a manner to assess those properties receiving direct financial benefit from proximity to the corridor.

From these options, it appears that the use of Federal, TFCA, CMA TIP allocation from the top could be the best short term strategy to maintain this investment for the region, until the Vehicle Registration Fee is passed, which can provide long-term funding for the program.

## **Section I - Introduction**

The purpose of this report is to present detailed information about the East Bay SMART Corridors Program and the Operating and Maintenance (O&M) funding requirements to sustain the program. The report also discusses the benefits, constraints and opportunities and other options to potentially reduce or constrain the O&M costs. In particular, the report has the following five objectives:

- 1) to present a brief overview and description of the SMART Corridors Program and identify those components of the Program that generate ongoing O&M costs,
- 2) to quantify these ongoing O&M costs as well as existing revenues that remain available to meet these costs,
- 3) to identify potential strategies for reducing or mitigating these costs in the future,
- 4) to identify potential options for generating additional new revenues that could be used to meet current and future O&M costs of the existing and potentially expanded SMART Corridors Program,
- 5) lastly, to present recommendations for next steps in addressing the O&M cost issue.

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# Section II - Brief Overview of the SMART Corridors Program

The East Bay SMART Corridors program is a cooperative effort by the Alameda County CMA and 27 other partner agencies to plan and implement a multi-modal advanced transportation management system along San Pablo Avenue (I-80 corridor), International Blvd/E. 14<sup>th</sup> Street. Hesperian Blvd, Union City Blvd, San Leandro Street, San Leandro Blvd (I-880 corridor), and International Blvd/Telegraph Avenue (Intel corridor). In addition, CMA is currently working with Tri-Valley agencies and is in the process of the integration of the I-580 Smart corridor, as a part of the I-580 HOV widening project.

The goals of the East Bay SMART Corridors is to improve transportation mobility, efficiency and safety through better congestion management, real-time traveler and transit signal priority, and improved incident response. The following are the current agencies involved with program:

- Alameda County Congestion Management Agency;
- Contra Costa Transportation Authority;
- West Contra Costa Transportation Advisory Committee;
- Metropolitan Transportation Commission;
- Federal Highway Administration;
- Federal Transit Administration;
- California Department of Transportation;
- AC Transit;
- Western Contra Costa Transit Authority;
- Union City Transit;
- Livermore Amador Transit Authority;
- Alameda County;
- Contra Costa County;

- City of Albany;
- City of Berkeley;
- City of El Cerrito;
- City of Emeryville;
- City of Hayward;
- · City of Hercules;
- · City of Pinole;
- · City of Richmond;
- · City of Oakland;
- City of San Leandro;
- City of San Pablo;
- City of Union City;
- City of Dublin;
- City of Livermore; and
- City of Pleasanton.

The East Bay SMART Corridors program has already resulted in significant congestion reduction and increase in safety. For example, AC Transit Rapid Bus operation has achieved over 77% increase in ridership and 17% reduction in travel time, compared to Limited Services. Significant reduction in emergency vehicle response times have been achieved as well. Overall, the program has developed strong multi-agency partnership and cooperation.

The Operations and Management (O&M) is the on-going requirement to operate ad manage the system elements, and signifies both the management and maintenance of the system from regional perspective. All participating agencies have entered into a binding agreement for the O&M of the East Bay SMART Corridors Program.

# Section III - System Components Requiring O&M

The East Bay SMART Corridors includes Advanced Transportation Management Systems (ATMS) field components and centralized management system for the operation of the project. The program can be divided into the following major components:

- Communication System The communication lines between the centralized system
  and field components are leased from AT&T for wireline connections and Cingular
  for wireless communication. AT&T and Cingular are responsible for maintenance
  and troubleshooting of the communications network. Any maintenance or upgrades of
  the networks are covered in the monthly service fees.
- 2. <u>Field Utilities</u> The CCTV and video streaming equipment are using dedicated electrical power as the system is not relying on the power from local jurisdiction.
- 3. Centralized ATMS Hardware and Software The centralized software was developed by Bentley Transportation Systems and is located at a network hub located in San Francisco. This facility serves as the network hub for the data fusion and dissemination for the East Bay SMART Corridors program. This facility is maintained and managed on a 24x7 basis through a contract with AT&T.
- 4. <u>Agency ATMS System</u> Each operating agency is provided an ATMS workstation that provides real-time information about traffic conditions and statistics along the project corridors. The workstations are housed at each respective agency and are maintained by Track Computer, a computer and network maintenance firm, under contract with CMA.
- 5. <u>ATMS Field Equipment</u> The field elements of the Advanced Transportation Management System of the project are comprised of Closed Circuit TV, non-intrusive vehicle detection system, and emergency preemption and transit signal priority systems. The ATMS field components are owned by each local agency. The following are the major field equipment components:
  - a. Closed Circuit TV System

Closed Circuit TV (CCTV) system provides continuous 24x7 video streams to local agency personnel and to the public via the SMART Corridors web site (smartcorridors.com). CCTVs are installed at 36 intersections on existing signal mast arms. There are a total of 134 fixed CCTV cameras along the project corridor. The International-Telegraph project will add another 12 intersections or 48 cameras and six Pan-Tilt-Zoom (PTZ) cameras for AC Transit. The Tri-Valley will add an additional 11 PTZ cameras.

The CCTV images are compressed for bandwidth efficiency and connected to a broadband communication line bringing the video back to the central ATMS system. The video equipment is maintained by Track Computer and communications is maintained by AT&T. A separate field maintenance contractor is responsible for maintenance and/or repair of all other elements of

the CCTV system, including but not limited to the cabinet, service equipment, air conditioning unit, an Uninterruptible Power Supply (UPS) unit, cabling, and cameras.

## b. Traffic Monitoring Stations

The Traffic Monitoring Stations are non-intrusive vehicle detection which collect real-time volume and speed information along the project corridors. There are a total of 49 detection units installed along the project corridors. The International-Telegraph project will add another 10 monitoring stations. The Tri-Valley will add another 11 traffic monitoring stations.

The Traffic Monitoring Stations (TMS) are powered using a solar panel with battery backup units, and as such do not require metered power from PG&E. The only monthly recurring cost for TMS is the Cingular wireless connection used to relay real-time traffic data back to the ATMS system for viewing by project stakeholders.

The vehicle detection system data can be used by traffic engineers to analyze and react to changing traffic patterns with short notice without dispatching personnel and making extensive and costly studies. Moreover, the data is being warehoused for future access and use in planning activities, grant applications, etc.

c. Emergency Preemption and Transit Signal Priority Equipment

Emergency preemption and Transit Signal Priority (TSP) Opticom equipment receive and process both the high priority (fire) and low priority (transit) requests. A total of 118 intersections are currently equipped with the Opticom system, of which 79 intersections are configured for TSP capability. For the International-Telegraph Avenue project there will be an addition of 113 intersections with Opticom, of which 70 intersections will be configured for TSP capability. The Tri-Valley will add another 80 intersections with TSP capability.

- 6. <u>Signal Control System</u> The Signal control system, including traffic signal controllers, signal operation, signal appurtenances and video/inductive loop detection system is owned and maintained by each operation agency. Aside from the Opticom signal preemption/priority equipment in the field and on buses and fire trucks, no maintenance of signal control system components is required.
- 7. <u>Administration</u> A minimal amount of budget is required for CMA administration of various contracts.

# Section IV - Summary of Annual O&M Expenses and Revenues

This Section of the report presents the current estimate of available revenues and expenses associated with the Operations and Management (O&M) of the East Bay SMART corridors program.

## **ATMS O&M Cost Components**

The cornerstone of the East Bay SMART Corridors Program is the Advanced Transportation Management System (ATMS). The system relies on input from several types of field components and processing of the incoming data in a centralized data center. The following is an estimate of the costs for each category of maintenance and operation for a minimum, sustainable level of service, summarized by monthly and annual expenditure. The minimal, sustainable operation does not include any costs for contingencies, software maintenance, and upgrades of hardware. The costs are derived from the actual historical expenditures on the O&M of the system since inception.

# SUMMARY OF EXPENDITURES BY CORRIDOR

Cost Categor	Period	I-80 & I-880 SMART Corridors	International- Telegraph SMART Corridor	Tri-Valley SMART Corridor		
		Monthly	\$4,350	\$1,208	\$880	
(0)	Wireless	Annual	\$52,200	\$14,496	\$10,560	
1. Communications (0)		Monthly	\$16,255	\$5,418	\$4,475	
	Wireline	Annual	\$195,060	\$65,016	\$53,700	
2. Field Utilities (0)	Monthly	\$1,925	\$600	Local		
		Annual	\$23,100	\$7,200	Agency	
3. Centralized ATMS F	Monthly	\$8,840	\$2,210	\$1,500		
Software (M)		Annual	\$106,080	\$26,520	\$18,000	
4. Agency ATMS Syste	Monthly	\$3,850	\$962	\$1,000		
		Annual	\$46,200	\$11,544	\$12,000	
5. ATMS Field Equipm	Monthly	\$12,500	\$8,000	\$5,000		
J. 1111110 1 1010 Digital	<del></del>	Annual	\$150,000	\$96,000	\$60,000	
6. Signal Control Syste	Monthly	Local Agency	Local Agency	Local Agency		
7. Administration (M)		Monthly	\$7,600	_		
		Annual	\$91,200	_		
		Monthly	\$55,320	\$18,398	\$12,855	
TOTAL (O	&M)	Annual	\$663,840	\$220,776	\$154,260	

A detailed examination of existing O&M expenses indicates that the existing program has ongoing O&M expenditure requirements of approximately \$55,320 monthly or about \$663,840 annually for minimal, sustainable operation for existing I-80 and I-880 corridors.

However, in order to maintain the system in an optimal manner, additional costs have been identified that will enhance the system operation and efficiency. These costs include software maintenance, contingency for unforeseen accidents or knockdowns beyond a minimal level, equipment replacement, upgrades, management, contingencies, and inflationary costs. The following table shows a projected optimal budget level for overall system operation, management and maintenance, including existing system, International-Telegraph, but excluding the Tri-Valley system:

ITEM	FY 06/07	FY 07/08	FY 08/09	
Operations (Utilities, Communication, etc)	\$ 650,737	\$ 868,456	\$911,879	
Field Equipment Maintenance & Repair	\$ 331,448	\$ 574,496	\$ 603,220	
Professional Services (Software Maintenance & CMA Admin)	\$ 100,128	\$ 192,254	\$ 201,867	
Total	\$1,082,313	\$1,635,206	\$1,716,966	
Average Monthly Cost	\$90,193	\$136,267	\$143,081	

#### Revenues

Initial funding for O&M for SMART Corridors was programmed in FY 2000 by ACCMA and CCTA. The funding commitment was for a two year period. The O&M costs of the Program began with the Traffic Data and Video Exchange System and continued into the East Bay SMART Corridors program. Regardless of when the time commitment is assumed to have begun, the Program has extended beyond the two-year timeframe originally anticipated. The following table identifies the revenues historically and currently available for O&M.

Revenues Programmed for O&M (7/1/00 to Present)	
CMA and CCTA Original Funds	\$1,750,000
Incident Management	120,000
WCCTAC (O&M)	55,600
AC Transit (O&M)	122,880
WCCTAC (O&M – AVL)	23,000
Alameda County (PA 1, 2, &3)	92,000
MTC	200,000
TFCA	<u>395,000</u>
Total	\$2,758,480
Expenditures	
O&M Expenses (estimated as of 3/1/06)	<u>\$2,311,180</u>
Balance Remaining (as of 3/1/06)	\$447,300

#### **Evaluation of O&M Funding**

Based on the assumptions shown above for available O&M funding, as of March 1, 2006, there is \$447,300 in remaining funds. The current expenditures for minimal, sustainable system operation are approximately \$55,320 per month, or \$663,840 annually, for existing I-80 and I-880 corridors. Based on these assumptions, the current committed O&M funds would be exhausted in approximately eight months, or by December 1, 2006.

#### **Evaluation of Cost Allocation**

During the initial development of the East Bay SMART Corridors program, all participating agencies entered into a binding agreement for operations, ownership, maintenance and funding of the program. However, historically CMA has continued to fund the O&M operation using the grant funds and funding from various sources, including AC Transit, local agencies and MTC. At the April 2005 CMA meeting, the Board adopted the following costs distribution plan for the FY 05/06 and 06/07 for continuation of the O&M.

ITEM	FY 06/07	FY 07/08	FY 08/09
Transit Agencies (TSP maintenance/ATMS costs)	\$137,424	\$330,000	\$330,000
WestCAT (AVL wireless/maintenance costs)	\$57,584	\$60,350	\$63,368
Regional Agencies			
MTC (1/3 of Costs for FY-06/07 only)	\$295,768		_
CMA's (1/3 of costs for FY 06/07 only)			
ACCMA (mileage based)	\$ 215,821	\$481,075	\$511,506
CCTA (mileage based)	\$ 79,947	\$141,353	\$150,293
Local Agencies (1/3 of costs FY 06/07 only)			
Alameda County Local Agencies	\$201,702	\$481,075	\$511,506
Contra Costa County Local Agencies	\$94,067	\$141,353	\$150,293
Total Costs	\$1,082,313	\$1,635,206	\$1,716,957

It should be recognized that AC Transit's contribution to the O&M activities is contingent upon proper maintenance to ensure that field equipment operates effectively for the Rapid Bus Service. In order to maximize the use of remaining O&M funding, field maintenance has been delayed for 2.5 years. However, at this point, maintenance cannot be delayed any longer without a degradation of the SMART Corridors systems or a potential loss of funds from AC Transit.

Funding commitments have been made for future O&M costs by some of the participating agencies. The commitments include:

- AC Transit has committed about \$800,000 which is comprised of \$122,880 for FY 05/06, \$137,424 for the FY 06/07, and \$660,000 for FY 07/08 and FY 08/09.
- WCCTAC has provided the local agency part of their O&M for \$55,600 for FY 05/06, and has committed to provide approximately \$60,000 for FY 06/97.
- ACCMA and CCTA have not provided funds for O&M beyond the initial funds of approximately \$1,750,000.
- The local agencies of Alameda County (Planning Areas 1, 2, 3, and 4) have not provided any funds into the program with the exception of \$92,000 in STP augmentation, from Planning Areas 1, 2 and 3.
- WestCAT has provided initial year of funding, but has not committed any additional funds for future years.

# Section V - Options to Reduce or Constrain Costs

The East Bay SMART Corridors Program requires a scalable, distributable and cost-effective network system to collect and disseminate data and information to the public and various public agencies. The Program can be easily expanded, with the addition of new modes of transportation, corridors and partners without incurring dramatic incremental costs to either local agencies or the public.

At the time of Project start-up, consideration was given to the alternative of constructing or building a dedicated fiber optic system versus the alternative of leasing "access" on an existing telecommunications system. In evaluating these alternatives, a number of issues were considered, including; a) the cost of constructing and owning such a system (estimated at \$42 Million), b) current technologies and their rate of obsolescence, c) the costs of leasing access to an already existing, private system, and d) the perceived benefits accruing to both the public and agencies expected to use the system under either alternative. Following this evaluation, the decision was made to outsource the telecommunications component which allowed for the installation of 135 Closed Circuit TV (CCTV) cameras, 49 vehicle monitoring stations, and traffic signal modifications and improvements. The ACCMA retained dedicated staff to oversee the acquisition and installation of the equipment as well as manage the ongoing operations and maintenance of the Program as it expanded.

Operating and maintenance (O&M) costs were an important consideration in choosing whether to lease or own a telecommunications system. The operating costs of a leased network are typically higher than in an owned system due to monthly service costs. However, the maintenance costs are generally significantly lower because they are included in the monthly service fee. Conversely, the operating costs of an owned system are greatly reduced because there are no monthly fees. However, the maintenance costs of an owned system are much higher than a leased system because of the location of the fiber optics and its susceptibility to breakage or interruption. The system architecture of the Program was selected in a manner to minimize O&M costs. Wireless technology was used to avoid customizing bandwidth within the fiber optic system. The Program also leverages a competitive state-negotiated telecommunications rate.

Although the ACCMA's initial, somewhat informal, cost-benefit evaluation of the lease versus buy decision clearly favored a leased telecommunication system over a purchased or new, constructed one, this decision does not necessarily preclude the option of purchasing or constructing system components in the future if such a strategy would have the beneficial impact of reducing or limiting incremental operating and maintenance costs.

For example, as the Program expands to include the International/Telegraph Rapid Bus and the integration of I-580 smart corridors in the Tri-Valley area, a capital investment such as WiMax may prove to have potential. The standard for WiMax was recently ratified, and hopefully would mature soon. Although WiMax would reduce monthly service costs, it would likely increase maintenance costs as the Program would have to support the installed transmissions equipment, which could be in the range of \$500,000 to \$750,000 based on final technology costs. Operating costs would remain because each site would have to be

connected to Internet infrastructure using broadband telecommunication network with monthly fees.

Another potential strategy to reduce costs would be to reduce the leased line bandwidth from the existing broadband T1 to DSL, which can reduce the operating telecommunication costs by as much as 50% or \$130,000 annually. In addition, the wireless communication media can be modified to a daisy-chain agency-owned spread spectrum network. This option can reduce the operating costs by as much as 50%, or \$33,000 annually, but would require approximately \$1,000,000 in initial capital investment and \$20,000 in annual maintenance. The total potential reduction in monthly operating cost would in the range of \$143,000 annually.

Another potential strategy to reduce or constrain costs would be to capitalize operating and maintenance costs. This strategy is premised upon the belief that certain capital funding is more readily available form federal or state sources than O&M funding. Under this premise, it may be possible to "pre-pay" during the capital phase an amount that would enable them to absorb the ongoing O&M responsibility, assuming this would be an eligible expense. In addition, issues such as the cost, viability of the vendor and the ability of the contractor to adequately perform the operating and maintenance activities would need to be considered.

Another option to reduce the costs for ACCMA is to delegate the responsibility for operations and maintenance to the local agencies as stipulated in the O&M Agreement. However, this option will result in gradual degradation of the system as agencies may not maintain the system in an optimal manner due to lack of funding or expertise.

The final option, is to turn-off the system, which will result in significant increases in regional traffic and transit delays, including lost of capital investment with the Rapid Bus and Emergency Management systems. This will result in significant compromises in both congestion and safety.

## Section VI – Options for Funding O&M

As indicated in the previous sections, the revenues remaining from previous commitments of federal, state and local sources is limited and will soon be exhausted. In anticipation of this eventuality, the ACCMA undertook a study of other potential new sources of revenue that could be used to provide an independent stream of revenue to meet these ongoing O&M costs. This Section is a summary of the findings.

The ACCMA decided to investigate and evaluate four potential sources of revenue. They are: 1) Use of Federal SAFETEA-LU funds, Transportation Funds for Clean Air (TFCA), CMA TIP, 2) a vehicle use fee such as an annual vehicle registration fee or increment to the existing vehicle registration fee implemented by the State Dept. of Motor Vehicles, 3) a County Service Area implemented probably county-wide, including incorporated areas, and, 4) a benefit assessment district aligned along the specific corridor in a manner to assess those properties receiving direct financial benefit from proximity to the corridor. Each of these is briefly described below.

#### Federal, TFCA or CMA TIP Funds

Funding can be provided using Federal SAFETEA-LU, TFCA, or CMA TIP or combination of these funds, from existing or future programs. For example, MTC's Bay Area 511 and Translink programs are funded from the regional customer service projects. This option can also be exercised for the Alameda County and a limited funding from the top can be allocated for the Operations and Management of systems management, including the East Bay SMART Corridors program. If this program is included in the County Wide Transportation Plan, then the funding can be allocated from the overall program to this and other similar projects.

## Vehicle Registration Fee

Since 1991, when AB 434 was signed into law, the Bay Area Air Quality Management District has been collecting the \$4 surcharge on Department of Motor Vehicles fees to fund transportation projects that reduce vehicle emissions in the Bay Area. In Alameda County, this annual surcharge generates approximately \$4.5 annually which includes both Program Manager and Regional Funds.

In 2005, the ACCMA, in conjunction with other Bay Area counties, supported a bill (AB 1623) by Assemblyman Klehs that would have added \$5 to this surcharge for the purpose of providing an ongoing stream of revenue to the CMA to offset the O&M costs associated with SMART Corridors and perhaps other similar projects requiring continuing financial support. The bill was vetoed by the Governor. However, discussions are continuing with Assemblyman Klehs to reintroduce a bill this year, similar to AB 1623 that would add \$10 to the registration fee for 20 years, \$5 of which would go to the CMA for the same purposes. If passed, the new legislation would provide approximately \$5.625 Million annually to offset SMART Corridors O&M and other eligible costs.

#### County Service Area

A County Service Area, or CSA, may be established for the provision of "extended services" within the unincorporated areas of a county. These extended services are defined within the State Government Code (Sections 25210.1-25211.33: derived from 1953:858:2189. "County Service Area law") as, for example, services for police and fire protection, library services, street and highway lighting, sewer service, water supply and distribution and television translator services. Also included are "transportation services".

A CSA can be established by the County Board of Supervisors acting on its own initiative as requested by at least two members of the Board or by petition by at least 10 % of the registered voters of the area being proposed as a CSA. Approval of the County's Local Agency Formation Commission (LAFCO) is required prior to initiation of proceeding to establish a CSA. Importantly, all or any part of a city may be included in the CSA if approved by a majority of the City Council of the City.

The Board of Supervisors could initiate proceedings to establish a CSA through a"resolution of intention" and schedule a public hearing at least 30 but no more than 60 days after the adoption of the resolution. At the hearing, if 50 % or more of registered voters resides within the area, or if the owners of one-half or more of the value of the land and improvements in the area proposed to be included within the CSA file written protests against the establishment of the area, then the Board must abandon the proposed CSA.

The County of Alameda has had limited application of CSA's. Those that have been established in unincorporated areas have been quite small and established to provide critical facilities such as roads or sidewalks in developing areas. Generally, they have been employed when 100% of the residents to be included have petitioned the County to establish a CSA. As a result few, if any, "protests" have occurred.

Should LAFCO, the Board of Supervisors and the affected cities that are or will be included in the areas benefiting from the SMART Corridors Program all agree to establish a CSA for the purpose of funding ongoing operating and maintenance expenses, the real challenge facing this approach may not be the establishment of the CSA, but, rather the two-thirds affirmative vote required to levy annual assessments on each parcel included within the CSA.

#### **Benefit Assessment District**

California laws allowing local benefit assessments date back to the beginning of the 20<sup>th</sup> Century, when local governments used assessments to pay for physical improvements adjacent to the assessed land. More recently, the state has authorized the use of assessments for a broad array of facilities and services ranging from fire suppression to pedestrian malls.

In particular, a benefit assessment is a charge or fee levied on property to pay for public improvements, typically such as roads or street lights, which benefit property. The philosophy behind benefit assessments is to link the costs of public improvements to those property owners who specifically benefit from those improvements. The amount of the

assessment on a particular property must be related to the amount of benefit that property receives. In other words there must be a "nexus" between the amount of the assessment and the benefit derived. An assessment may be a flat amount per parcel or based on a measure such as square footage. Assessments cannot be based on the value of the property, because Proposition 13 limits the property value-based tax rate to one percent plus additions for certain types of voter approves debt service. Assessments typically appear on property tax bills.

Counties can levy any benefit assessments under specific authority granted by state law. The authorization acts vary in terms of which types of local governments can use them, whether voter approval is required, how to allocate costs among property owners, and whether n assessment can be nullified based on property owner protest. Most assessment acts do not require local agencies to obtain voter approval for a new or increased assessment. However, most contain provisions nullifying the assessment if a majority of property owners protest, and all require due process.

Local agencies considering implementing an assessment district must notify affected landowners 45 days in advance and hold a public meeting and a public hearing on the proposal. The notice must include the estimated amount of assessment per parcel, the purpose of the assessment , the dates, times, and locations of the public meeting and public hearing , and instructions for protesting the assessment, if applicable.

Benefit assessments are typically defined geographically and levied on all parcels within a designated benefit assessment district. Certain types of properties can be excluded, such as churches from assessments. The boundaries of a benefit assessment district may coincide exactly with those of a city, county, or special district, or they may cover only part of those jurisdictions.



# ALAMEDA COUNTY CONGESTION MANAGEMENT AGENCY

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#### Memorandum

March 13, 2006 Agenda Item 3.2

DATE:

March 3, 2006

TO:

Plans and Programs Committee

FROM:

Matt Todd, Senior Transportation Engineer

RE:

Soundwall Design:

San Leandro Soundwalls – Estudillo to 141<sup>st</sup> along I-580 Oakland Soundwalls – 14<sup>th</sup> and Ardley along 1-580

**Action Requested** 

The CMA Board approved \$1,017,000 of CMA TIP funds to complete the design of freeway soundwalls along I-580 in San Leandro (Estudillo to 141st) and Oakland (14th and Ardley). The CMA has received consultant proposals to complete this design work. Based on a review of the Caltrans work completed to date and considering the time estimated to complete the work that is in the consultant proposals, staff proposes to adjust the budget required to complete the design. Based on estimated hours to complete the work in the consultant proposals, it is recommended that the Board approve an additional \$1,233,000 of CMA TIP funds be programmed to the project for a total funding package of \$2,250,000.

**Next Steps** 

The Committee's recommendation will be forwarded to the Board for action at the March meeting.

#### Discussion

In an effort to expedite the delivery of the two soundwall projects along I-580 in San Leandro (Estudillo to 141st) and Oakland (14th and Ardley), the CMA has agreed to take over the design of these projects from Caltrans. The design for both of these projects was initiated, but never completed by Caltrans.

Initial cost estimates provided by Caltrans indicated that the San Leandro soundwalls would require about \$730,000 and the Oakland soundwalls would require \$290,000 to complete the design and finalize construction packages. CMA staff met with Caltrans to collect all the relevant design work that has been completed to date for the two locations. CMA staff review of the design work completed to date by Caltrans indicates that a higher level of effort will be required to complete the design then had originally been estimated by Caltrans.

The CMA has received consultant proposals to complete this design work. Based on a review of the Caltrans work completed to date and considering the time estimated to complete the work

that is in the consultant proposals, staff proposes to adjust the budget required to complete the design. Based on estimated hours to complete the work in the consultant proposals, CMA staff recommends an additional \$1,233,000 of CMA TIP funds be programmed to the project. This will bring the total CMA TIP programming to \$2,250,000. Once the design team is selected, staff will also review the Caltrans supplied information with the design team to determine if any existing information can be used to minimize the overall design cost.

The San Leandro component has capital funding programmed for FY 07/08 in the STIP. The Oakland component still needs capital funding which can be requested in a future STIP programming cycle. A current cost estimate for the construction phase of the project is anticipated to be available at the meeting.

A companion item to authorize the Executive Director to execute all necessary agreements required to complete the design for the freeway soundwalls in San Leandro (Estudillo to 141<sup>st</sup>) and in Oakland (14<sup>th</sup> and Ardley) along I-580 in an amount not to exceed \$2,250,000 will be considered by the Administration and Legislation Committee.

# **CMA Exchange Projects -Quarterly Status Report** February 2006

Index	CMA Exchange Project Number	Sponsor	Project	Exchange Fund Source	!			Amount Rec'd (as of 1/30/06)		Amount Remaining o be rec'd)	Estimated Payback Date (full amount)	Agreement Status <sup>1</sup>	Notes
1		AC Transit	Bus Rehabilitation	STIP-RIP	\$	20,182,500	\$	20,182,514	\$	-	Done	E	
2		AC Transit	Bus Component Rehab	STP	\$	4,000,000	\$	4,000,000	\$		Done	E	
3	Ex 3	AC Transit	Bus Component Rehab	STIP-RIP	\$	4,500,000			\$	4,500,000	12/31/08	D	
4	Ex 4	BART	Seismic Retrofit	STIP-RIP	\$	8,100,000	\$	8,100,000	\$	<u>-</u>	Done	E	
5	Ex 5	Berkeley	Street Resurfacing	STP	\$	275,000			\$	275,000	12/31/07	D.	Sent Berkeley a draft agreement
6	Ex 6	Dublin	Tassajara Interchange	STIP-RIP	\$	4,230,000	\$	4,230,000	\$	<u> -                                   </u>	Done	E	
7	Ex 7	Fremont	Street Rehabilitation	STIP-RIP	\$	2,196,900	\$	2,196,900	\$	-	Done	E	
8	Ex 8	Fremont	Street Resurfacing	STP	\$	858,000			\$	858,000	12/31/07	D	Preparing a draft agreement for Fremont
9	Ex 14	Fremont	Street Overlay -13 Segments	STP	\$	1,581,000			\$	1,581,000	12/31/08	N	Agreement will follow adoption into TIP
10	Ex 9	Livermore	Isabel Interchange	STIP-RIP	\$	3,600,000	\$	3,600,000	\$	-	Done	E	
		MTC	East Dublin County BART	STP	\$	750,000	\$	750,000	\$		Done	E	
11 12		Union City	UC Intermodal Station (Exch 1)	STIP-TE	\$	2,727,000			\$	2,727,000	6/30/08	N	Pending 2006 STIP
13	Ex 12	Union City	UC Intermodal Station (Exch 2)	STIP-RIP	\$	2,283,000			\$	2,283,000	6/30/11	N	Pending 2006 STIP
14	Ex 13	Union City	UC Intermodal Station (Exch 3)	STIP-RIP	\$	4,004,000			\$	4,004,000	12/31/10	N	Pending 2006 STIP
17	LA 10	TO MOTO ONLY			\$	59,287,400	\$	43,059,414	\$	16,228,000			

Notes:

E = Agreement Executed

A = Agreement Amendment in Process

D = Agreement in Draft Form N = Agreement Not Initiated

D = Agreement in Dra
N = Agreement Not In
Prepared by Advance Project Delivery Inc.

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